FISH MANAGEMENT PLAN SPECTACLE LAKE

Water: Spectacle Lake, Okanogan County, Washington

Management Type: Trout Only (rainbow/kokanee)

Location: Near the town of Loomis, WA, Sections 2-4-9-10-11, T38N, R26E WM.

Size: 307 acres, 32 feet approximate average depth, 9,754 acre feet

Water Source: subsurface flow, irrigation water from Toats Coulee Creek via pipeline

Outflow: intermittent during irrigation season only into Whitestone Lake

Management History: Since its inception, this fishery has been managed as a production fishery, owing to its large size, excellent productivity, and operation of three resorts. Historically, the lake opened on the traditional April opener and closed on July 31st. In 1994, opening day was changed to March 1st at the request of the resort owners. In 2006, the season was lengthened to allow for additional fishing opportunity (April 1st through September 30th).

Due to the illegal planting of spiny ray fishes (bass, bluegills, and brown bullheads), the lake was rehabilitated in fall of 2005. The treatment was successful, but in the following year, yellow perch were illegally introduced and are now impacting the trout fishing. Stocking of catchable rainbows have taken place in an attempt to counteract the competition and predation issues brought on by the illegal introductions. Catchable plants are very expensive to produce and do not have the same effect or quality as fingerling fish that are normally stocked in the spring and allowed to grow to catchable size.

Recent (spring/summer 2013) gill net surveys indicate an increasing spiny ray population of both bluegill and yellow perch. Because of the decline in fingerling survival, the trout fishery has been "propped up" in the last three years by stocking high numbers of catchable size rainbows. Removal of the competing species is the best way to return the lake to fingerling trout plants and to restore the quality trout fishery.

Current Management Objectives:

Manage the lake for predominately trout, but plant kokanee for additional angler opportunity. Provide at least four yearling and one carryover rainbow trout per angler trip for up to 10,000 angler trips per season. Additional plants of kokanee would provide variety, as well as taking advantage of the abundant plankton production.

(1) Fishery objectives:

To provide for 2-3 rainbow-per-hour catch rate, consisting of four (4) 10-12 inch yearlings, as well as one (1) carryover fish in the 15+ inch range. In addition, kokanee in the 10-12 inch range would provide anglers with diversity.

(2) Angler use objective (# angler days):

The goal is to provide for approximately 5,000+ angler-days per year.

(3) Stocking Objectives:

Yearly plants of 50,000-75,000 fingerling rainbow at 100 fish per pound in April/May, stocked at 163-244 fish per acre. These numbers might be increased if yearling growth indicates an increase is warranted. Kokanee would be planted yearly at a rate of 50,000 fish at 250 fish per pound in April.

(4) Management Strategy:

- Monitor yearling trout growth. It should be about 11-12 inches. Adjust stocking rate as necessary.
- Expect 80% loss of yearling fish by end of the fishing season due to harvest and hooking mortality.
- Maintain about 15-20 percent of the catch at age 2+ years old and 15+-inch fish.
- Monitor angling activity and catch rates annually with opening day surveys.
- Monitor all fish species present by periodically by electrofishing or netting.
- Control spiny-ray species with rotenone when trout survival is inadequate.
- Monitor kokanee introductions to provide angler variety.